

General Information

1991

Video: 3 Heads Rotary

Audio: Fixed Head 1CW

Covers Models:

Akai VS-F300

Akai VC-F320

Matrix	
Item	See Model
Mechanical Parts View	Akai VS-422/425 89/90 Book.
Mechanical Adjustments	Akai VS-F10/11 91/92 Book.
Back Tension Adjustment	Akai VS-F260
Electrical Adjustments	Akai VS-F260
Power Supply - VS-F320 EM	Akai VS-F260
VIF Unit	Akai VS-F260
R/C Other	Akai VS-F260

Recommended Safety Parts		
Item	Part No.	Description
FR201	ER-400959J	R Fuse V TO5 ERD2FCV1/4W1200G
FR202	ER-404093J	R Fuse V TO5 RF25SCVTP1/4WR56K
FR350	ER-400729J	R Fuse V TO5 RF25SCVTP1/4WR47K
FR501	ER-404092J	R Fuse H S10 RF25S 1/4W R56J
TR20	ET-389417J	TR 2SD2096 E,F TO5
TR210	ET-389417J	TR 2SD2096 E,F TO5 Except EM)
D1 - D12	ED-511907	D.Silicon 1N4002 100/1.0A
D16	ED-404029J	D.Zener H.UTZJ10B T26
FR1 - FR4	ER-404029J	R.Fuse V TO5 RF25SCVTP1/4WR12K
FR5	ER-400605J	R.Fuse V TO5 ERD2FCV 1/4W15ROG
TR1	ET-381175J	TR2SD1856
TR2, TR7	ET-366365	TR2SB1185 E,F
TR3 - TR6	ET-380685J	TR2SD1761 E,F,G
EM Only:		
C101	EC-389414J	C CE V DE7 B102K
D1, D2		
D3, D4	ED-511907	D Silicon 1N4002 100/1.0A
D6, D8, D11	ED-386226J	D Schottky RB100AT-32T26 40/1
D17, D18		
D23 - D26, D101	ED-511907	D.Silicon 1N4002 100/1.0A
FR1 - FR4	ER-400728J	R Fuse V TO5 RF 25SCVTP1/4WR12K
R5	ER-405441J	R Fuse V TO5 RF25SCVTP1/4WR27K
FR6, FR101	ER-400689J	R Fuse V TO5 RF25SCVTP1/4WR68K
FR102	ER-401039J	R Fuse V TO5 ERD2FCV 1/4W 3R7J
RL101	EQ-400153J	Relay Pow AG2013 1TR 12V
TR1, TR5,		
TR9, TR13	ET-366365	TR2SB1185 E,F
TR2, TR7, TR12	ET-380685J	TR2SD1761 E,F,G
TR4	ET-366168	TR2SD1292 Q,R
	BT-403252J	Trans Pow V1130 EA (EA)
	BT-403872J	Trans Pow V1130 EK (EK)
	BT-403873J	Trans Pow V1130 EO (EOH)
	BT-403251J	Trans Pow V1130 EM (EM)
	EW-404003M	AC Cord 200 SA-2 with Tube S (EA)

Mechanical Parts List

Description	Part No.	Description	Part No.	Description	Part No.
6SET20X30SCM PKR FP	ZS-374458	DT BID30X06STL		Lever Damper (S)	ML-387345J
6SET30X080SCM PKR CP	ZG-373900	CMT C080	ZS-389853J	Lever Damper (T)	ML-387346J
		DT BID30X06STL		Lever Lock Release	ML-387344J
Arm Coupling	ML-387311J2	CMT C080	ZS-389853J	Lever Trigger	ML-387402J1
Arm Damper	ML-391745J2	Earth Brush Part AG	VT-401282J	Lower Drum BLK F300EA	BV- V1123A410D
Arm Lid Opener	ML-387350J1				
Arm Loading BLK 425A	BL-V1102A140A	Gear Cam Slider (2)	MZ-396021J	Main Brake (S) Part	ML-387316J
Arm Pinch Roller (2)		Gear Eject	MZ-387335J	Main Brake (T) Part	ML-387318J
BLK 425EA	BL-V1102A160A	Gear Front Loading	MZ-387333J	Mecha Deck Blk F300EA	BB- V1130A020B
Arm Reveiw Part	ML-387277J3	Gear Toggle(S) LK 425 EA	MZ- V1102A090A		
Arm Shutter	ML-387349J2	Gear Toggle(T) BLK 425 EA	MZ- V1102A100A	Motor DFX-67B3VWB1	
				(Capstan Motor)	BM-400682J1
Base Drum	MA-387474J2	Gear Worm (2)	MZ-401686J	Motor E20EL89	
Belt Capstan	MB-387289J	Gear Worm Wheel	MZ-387332J	(Drum Motor)	BM-401296J
BID26X08SRL CMT	ZS-563444	Guide Front(2)	SE-395554J	Motor Part (Loading Motor)	BM-387503J
BID30X06STL CMT	ZS-379405	Guide Roller D8 Part	VT-387394J1	Nut Review	ZW-401776J
BID30X08STL CMT	ZS-321298				
BID30X08STL CMT	ZS-321298	Head Combo HVMZA1121A	HR-405340J	PAN20X02STL BZN PS1	ZS-404844J
BID30X03STL CMT	ZS-425981	Head E HVFME0020A	HE-390013J	PAN26X12STL CMT	ZS-467796
		Holder D-LED	MZ-387430J	PAN30X06STL CMT	ZS-379350
Capstan Brake Park	BL-387458J2	Holder FPC	SZ-387388J	PC () Sensor	EA-387496J
Cassette Load		Holder Head Part B	MZ-402760J	Plate Upper	MZ-387351J1
BLK 425EA	BV-V1102A150A	Holder Lever Tension	SZ-38726312	PT BID26X06STL CMT	ZS-365149
Cord FFC P .25		Holder Photo Sensor	MZ-387446J	PT BID26X10STL CMT	ZS-389950J
L = 120 13P (WP1)	EW-389313J	Holder S Sensor	MZ-387445J	Pulley Trigger(2)	MR-391968J
Cushion Cover	SZ-391866J1	Holder Thrust Worm(2)	MR-404544J	PW26X060X050PSL	ZW-389923J
		Idler Part	MI-387294J	PW31X110X050PSL	ZW-389814J
D LED GL451 Infrared (D1)	ED-390011J				
D LED GL4800		Leader S BLK 425EA	BV- V1102A070A	Retaining Ring Grip	
Infrared (D2)(D3)	ED-390012J	Leader T BLK 425EA	BV- V1102A080A	38OSTL ACP	ZW-332843
Disk (2) Part	MT-390954J1			Reveiw Brake Part	ML-387321J
Disk Clutch Part	MZ-387298J3			Rew Brake Part	MZ-404539J
				Roller Impedance	MR-387286J1

Service Adjustments

Video REC Current

1: "REC", PAL colour bar signal

2: P2 (REC CURR), JW188 (C.SYNC) & VR1 (REC-CHROMA), VR2 (RECY)

3: Connect an oscilloscope's CH-1 to P2 (REC.CURR) and CH-2 to JW188 (C.SYNC) for triggering. Turn the VR2 (REC-Y) fully counterclockwise.

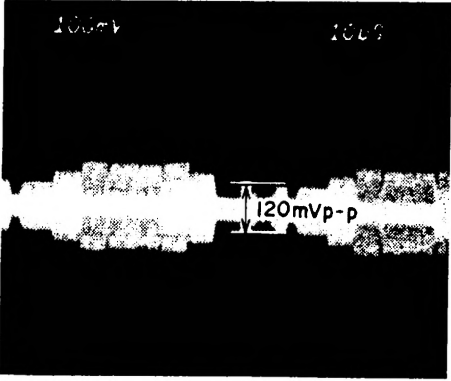
*Adjust VR1 (REC-CHROMA) so that the chroma REC current becomes 120 mVp-p at the burst signal area.

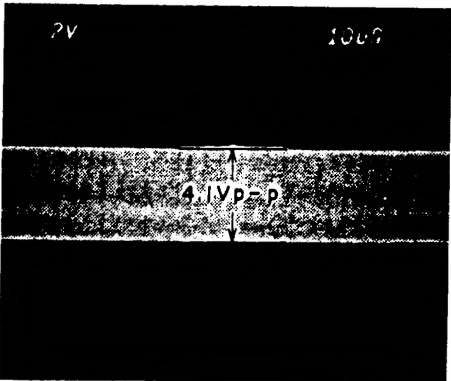
*Disconnect the input signal, then adjust VR2 (REC-Y) so that Y REC current becomes 4.1 Vp-p.

Note: See Matrix for other adjustments.

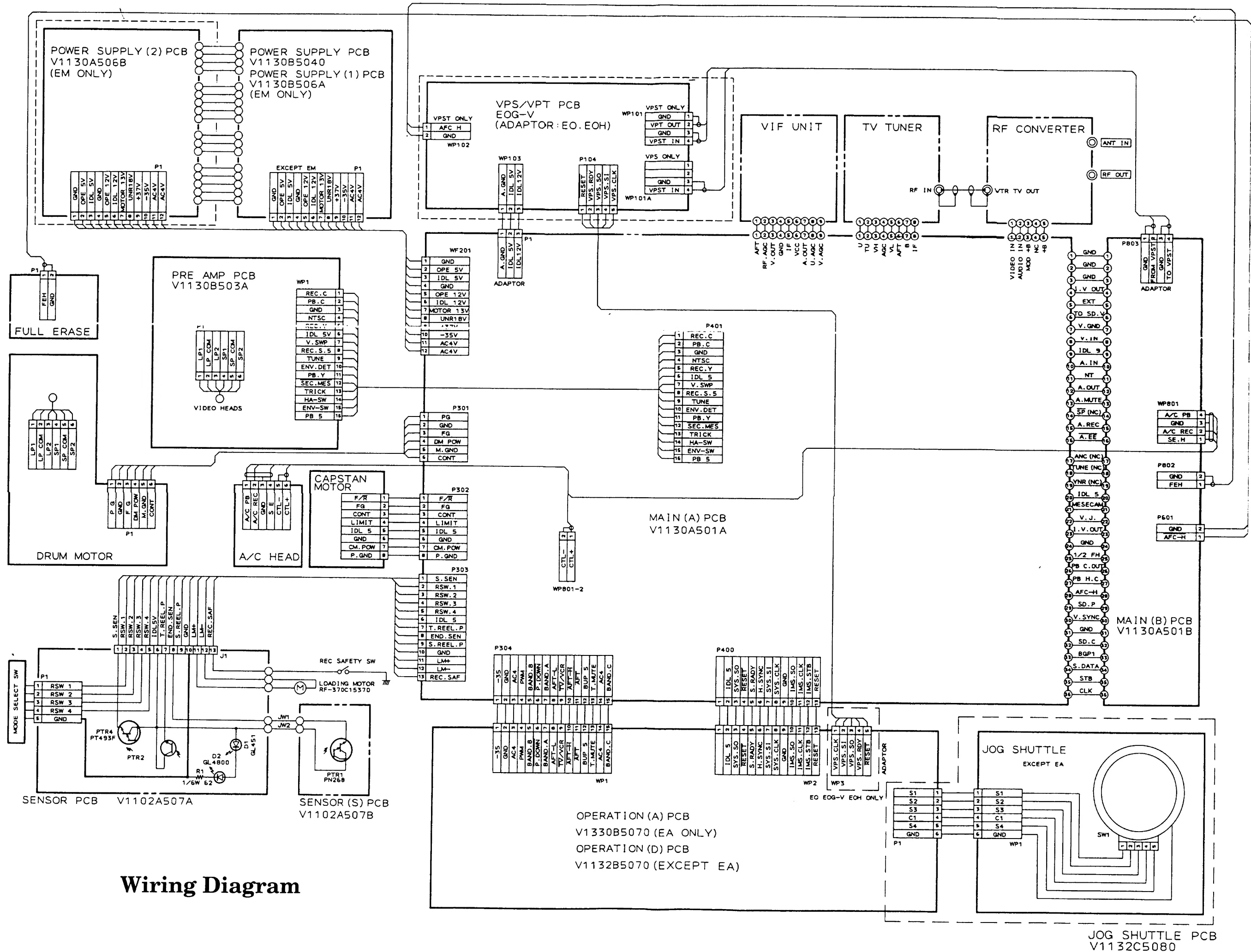
Part No.	Description	Part No.	Description
BV-V1123A410D	Lower Drum Blk F300EA		
BV-V1102A420G	Upper Drum Blk F15EA		
BM-401296J	Motor E20EL89 (Drum Motor)		
HR-405340J	Head Combo HVMZA1121A		
HE-390013J	Head HVFME0020A		
BM-400682J1	Motor DFX-67B3VWB1 (Capstan Motor)		
BM-387503J	Motor Part (Loading Motor)		

Waveforms





Head Motors and Miscellaneous	
Part No.	Description
BV-V1123A410D	Lower Drum Blk F300EA
BV-V1102A420G	Upper Drum Blk F15EA
BM-401296J	Motor E20EL89 (Drum Motor)
HR-405340J	Head Combo HVMZA1121A
HE-390013J	Head HVFME0020A
BM-400682J1	Motor DFX-67B3VWB1 (Capstan Motor)
BM-387503J	Motor Part (Loading Motor)

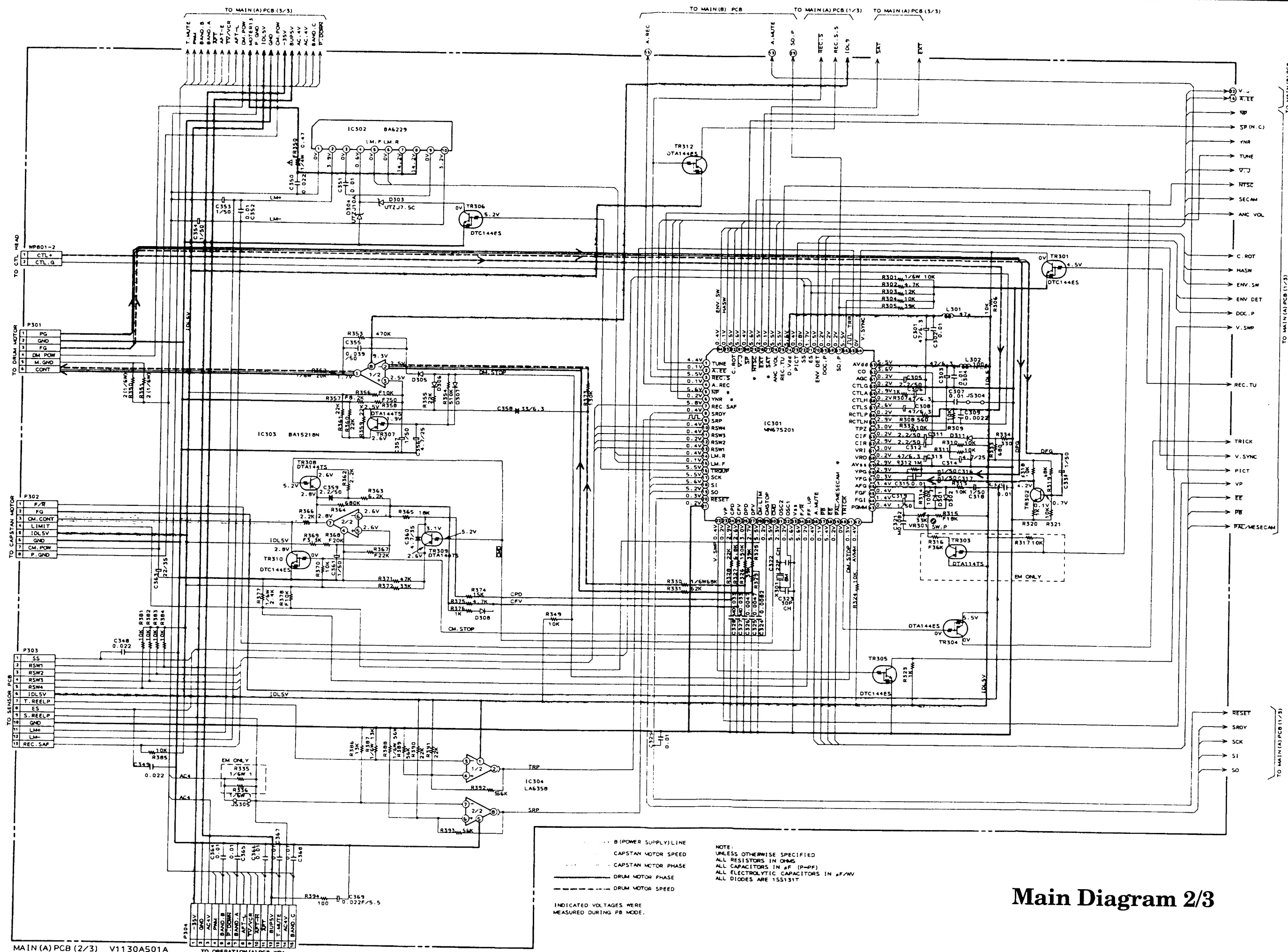


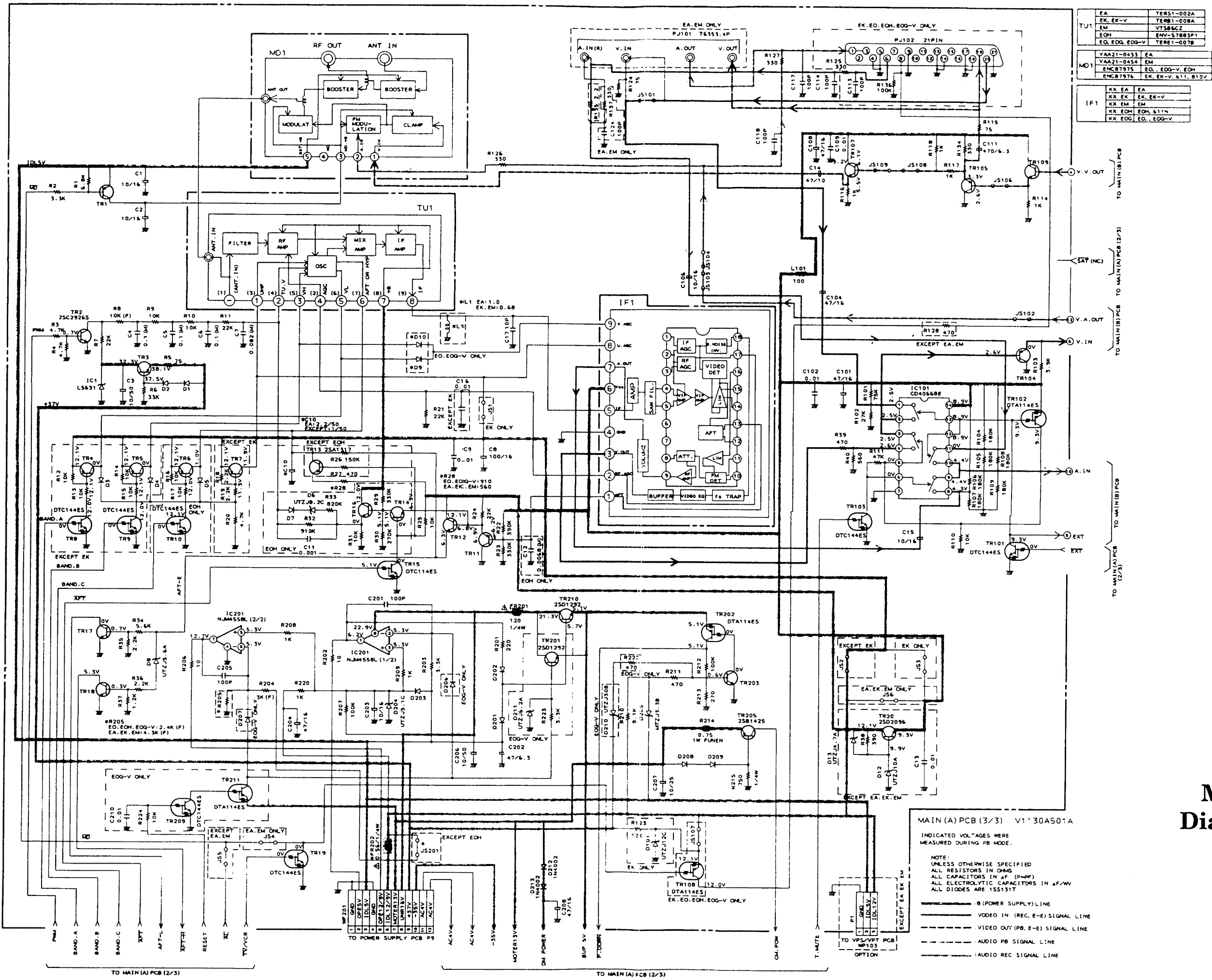
INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.

①	B (POWER SUPPLY) LINE
②	PB CHROMA SIGNAL LINE
③	REC CHROMA SIGNAL LINE
④	REC Y SIGNAL LINE
⑤	PB Y SIGNAL LINE

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN $\mu F/WV$
ALL DIODES ARE 1SS131T

TO MAIN(A) PCB 2





TU1	EA	TER51-002A
	EK, EK-V	TER51-002A
	EM	VTS66CZ
	EQH	ENV-57883F1
	EQ, EQH, EQH-V	TER51-007B

MO1	YAA21-0453	EA
	YAA21-0454	EM
	ENC87975	EQ, EQH-V, EQH
	ENC87976	EK, EK-V, 6.11, 8.10V

IF1	KX, EA	EA
	KX, EK	EK, EK-V
	KX, EM	EM
	KX, EQH	EQH, 6.11V
	KX, EQH	EQ, EQH-V

Main
Diagram
3/3

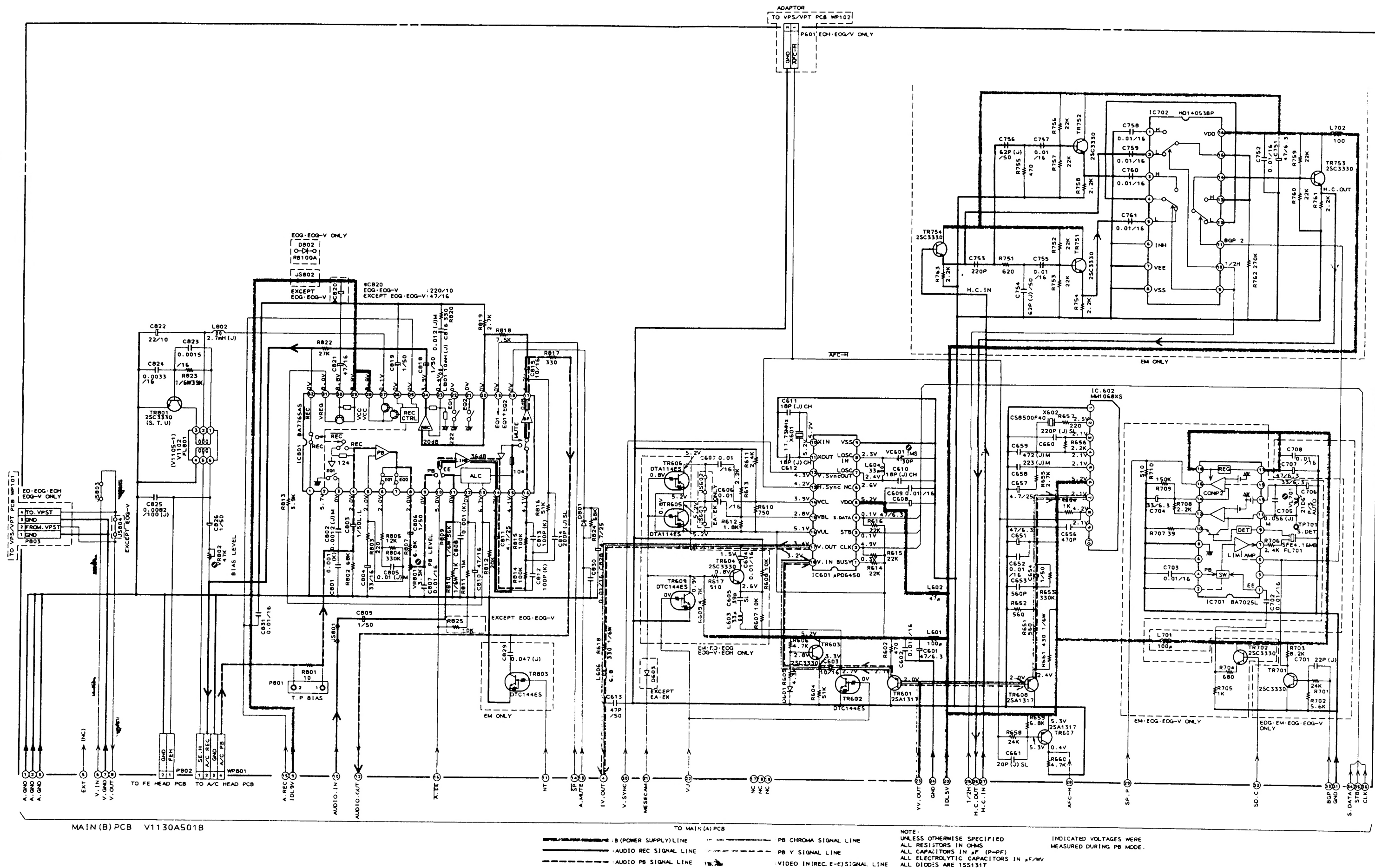
MAIN (A) PCB (3/3) V1'30A501A

INDICATED VOLTAGES WERE MEASURED DURING PB MODE.

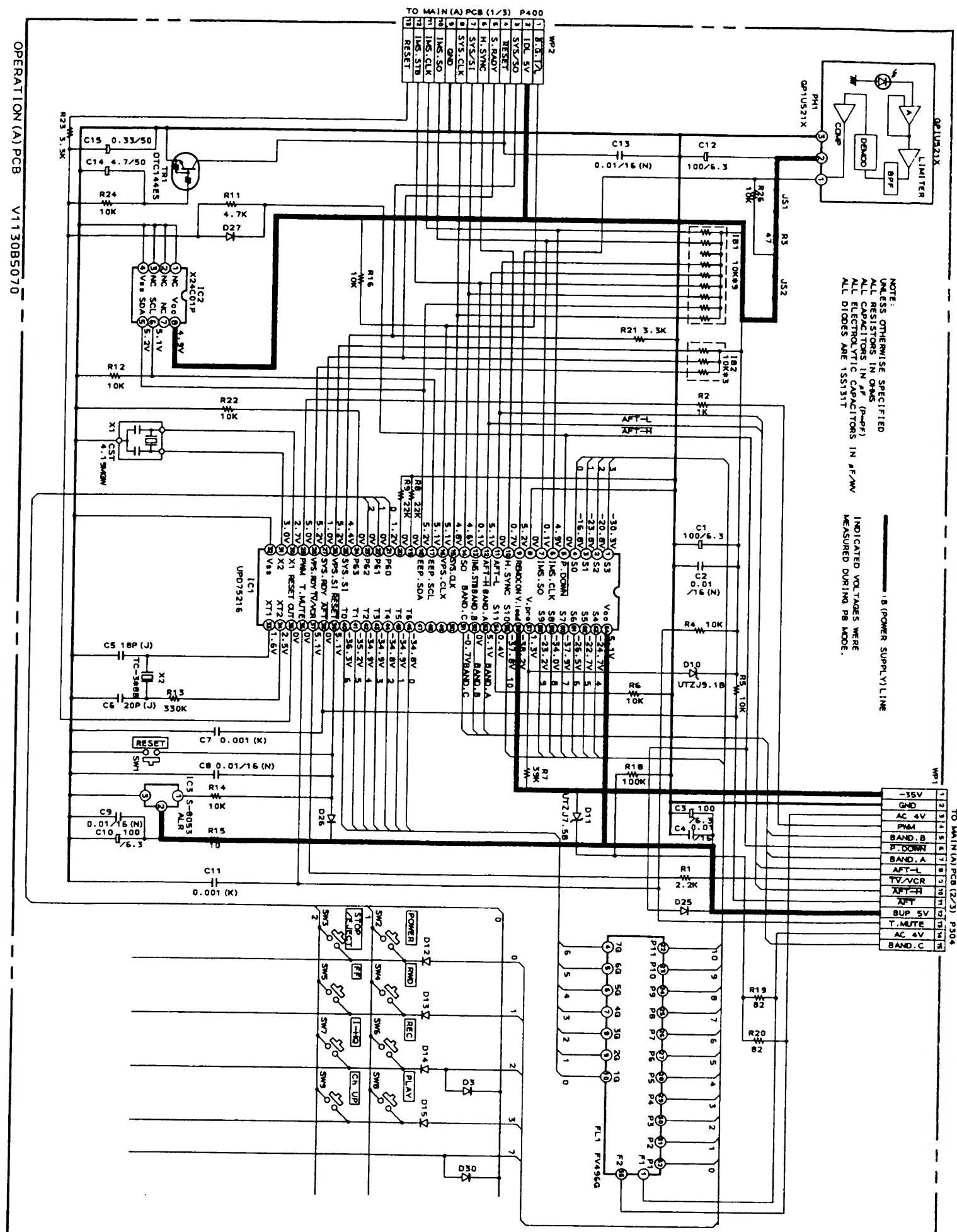
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN PF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μ F/W
ALL DIODES ARE 1S5131T

— B (POWER SUPPLY) LINE
— VIDEO IN (REC, E-E) SIGNAL LINE
— VIDEO OUT (PB, E-E) SIGNAL LINE
— AUDIO PB SIGNAL LINE
— AUDIO REC SIGNAL LINE

Main Diagram B



Operation Diagram A



Operation Diagram D

